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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/740,843 | 12/21/2000 | Takayuki Sugahara | 0102/0151 | 6519 |

21395 7590 03/22/2004

LOUIS WOO
LAW OFFICE OF LOUIS WOO
717 NORTH FAYETTE STREET
ALEXANDRIA, VA 22314

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| EXAMINER |
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HOFFMAN, BRANDON S

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| ART UNIT | PAPER NUMBER |
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2136

DATE MAILED: 03/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,843

Applicant(s)

SUGAHARA ET AL.

Examiner

Brandon Hoffman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 7-28 are newly added and pending in this office action, claims 1-6 are canceled.
2. Applicant's arguments, filed January 16, 2004, with respect to the rejection(s) of claim(s) 1-6 under 35 U.S.C. 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made by Pinder et al. in view of Widmer.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 9, 10, 14-16, 19, 20, and 25-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Pinder et al. (U.S. Patent No. 6,105,134).

Regarding claims 9 and 19, Pinder et al. teaches a method/apparatus of encrypting contents information, comprising the steps of:

- Generating a first-key signal representative of a first key from first-key base information according to a first function (fig. 2A, ref. num 203), the first-key base information being a base of the first key (fig. 2A, 202);
- Encrypting contents information into encryption-resultant contents information in response to the first-key signal (fig. 2A, ref. num 201);

- Generating a second-key signal representative of a second key from second-key base information according to a second function (fig. 2A, ref. num 205), the second-key base information being a base of the second key (fig. 2A, ref. num 208);
- Encrypting at least a portion of the first-key base information in response to the second-key signal to convert the first-key base information into encryption-resultant first key base information (fig. 2A, ref. num 204);
- Generating transmission-purpose key base information from the second-key base information and an authentication value according to a third function (fig. 2A, ref. num 206 and 207); and
- Transmitting the encryption-resultant contents information, the encryption-resultant first-key base information, and the transmission-purpose key base information to a transmission line (fig. 2A, ref. num 200).

Regarding claims 10 and 20, Pinder et al. teaches wherein the first and second functions are one-way functions (col. 5, lines 24-33).

Regarding claims 14 and 25, Pinder et al. teaches a method/apparatus of decrypting contents information, comprising the steps of:

- Receiving encryption-resultant contents information, encryption-resultant first-key base information, and transmission-purpose key base information from a transmission line (fig. 2B, TDS to DEMULTIPLEXER);

- Generating an authentication value from a decryption-side ID information peculiar to a decryption side and previously-fed issue ID information which has been generated by an encryption-resultant contents information provider side (fig. 2B, ref. num 232),
 - The generated authentication value is equal to an authentication value used to generate the transmission-purpose key base information (col. 7, lines 4-6);
- Generating second-key base information from the reproduced transmission-purpose key base information and the generated authentication value according to a first function, the second-key base information being a base of a second key (fig. 2B, ref. num 234);
- Generating a second-key signal representative of the second key from the generated second-key base information according to a second function (fig. 2B, MSK);
- Decrypting the reproduced encryption-resultant first-key base information into recovered first-key base information in response to the generated second-key signal, the recovered first-key base information being a base of a first key (fig. 2B, ref. num 236);
- Generating a first-key signal representative of the first key from the recovered first key base information according to a third function (fig. 2B, CW); and
- Decrypting the reproduced encryption-resultant contents information in response to the generated first-key signal to recover original contents information (fig. 2B, ref. num 238).

Regarding claims 15 and 26, Pinder et al. teaches wherein the first function is inverse with respect to a function which has been used by the encryption-resultant contents information provider side to generate the transmission-purpose key base information (col. 8, lines 39-63).

Regarding claims 16 and 27, Pinder et al. teaches wherein the second and third functions are one-way functions (col. 8, line 64 through col. 9, line 24 and lines 41-55).

Regarding claim 28, Pinder et al. teaches further comprising means for allowing a user to input the issue ID information (col. 15, lines 36-55).

Claim Rejections - 35 USC § 103

4. Claims 7, 8, 11-13, 17, 18, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinder et al. (U.S. Patent No. 6,105,134).

Regarding claims 7 and 17, Pinder et al. teaches a method/apparatus of encrypting contents information, comprising the steps of:

- Generating a first-key signal representative of a first key from first-key base information according to a first function (fig. 2A, ref. num 203), the first-key base information being a base of the first key (fig. 2A, ref. num 202);
- Encrypting contents information into encryption-resultant contents information in response to the first-key signal (fig. 2A, ref. num 201);

- Generating a second-key signal representative of a second key from second-key base information according to a second function (fig. 2A, ref. num 205), the second-key base information being a base of the second key (fig. 2A, ref. num 208);
- Encrypting at least a portion of the first-key base information in response to the second-key signal to convert the first-key base information into encryption-resultant first key base information (fig. 2A, ref. num 204); and
- Generating transmission-purpose key base information from the second-key base information and an authentication value according to a third function (fig. 2A, ref. num 206 and 207).

Pinder et al. does not specifically teach recording the encryption-resultant contents information, the encryption-resultant first-key base information, and the transmission-purpose key base information on a recording medium. However, the Examiner believes it to be well known to record contents on a recording medium.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to record the contents data on a recording medium. It would have been obvious to one of ordinary skill in the art to record the contents data on a recording medium because recording the contents data allows the data to be saved for later use or transmission to another device.

Regarding claims 8 and 18, Pinder et al. as modified teaches wherein the first and second functions are one-way functions (col. 5, lines 24-33).

Regarding claims 11 and 21, Pinder et al. teaches a method/apparatus of decrypting contents information, comprising the steps of:

- Receiving encryption-resultant contents information, encryption-resultant first-key base information, and transmission-purpose key base information from a transmission line (fig. 2B, TDS to DEMULTIPLEXER);
- Generating an authentication value from a decryption-side ID information peculiar to a decryption side and previously-fed issue ID information which has been generated by an encryption-resultant contents information provider side (fig. 2B, ref. num 232),
 - The generated authentication value is equal to an authentication value used to generate the transmission-purpose key base information (col. 7, lines 4-6);
- Generating second-key base information from the reproduced transmission-purpose key base information and the generated authentication value according to a first function, the second-key base information being a base of a second key (fig. 2B, ref. num 234);
- Generating a second-key signal representative of the second key from the generated second-key base information according to a second function (fig. 2B, MSK);

- Decrypting the reproduced encryption-resultant first-key base information into recovered first-key base information in response to the generated second-key signal, the recovered first-key base information being a base of a first key (fig. 2B, ref. num 236);
- Generating a first-key signal representative of the first key from the recovered first key base information according to a third function (fig. 2B, CW); and
- Decrypting the reproduced encryption-resultant contents information in response to the generated first-key signal to recover original contents information (fig. 2B, ref. num 238).

Pinder et al. does not specifically teach reproducing encryption-resultant contents information, encryption-resultant first-key base information, and transmission-purpose key base information from a recording medium. However, the Examiner believes it to be well known to reproduce contents from a recording medium.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to reproduce the contents data from a recording medium. It would have been obvious to one of ordinary skill in the art to reproduce the contents data from a recording medium because reproducing contents data from a recording medium allows the data to be saved prior to its use, therefore giving the user the freedom to choose when to use the data.

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Regarding claims 12 and 22, Pinder et al. as modified teaches wherein the first function is inverse with respect to a function which has been used by the encryption-resultant contents information provider side to generate the transmission-purpose key base information (col. 8, lines 39-63).

Regarding claims 13 and 23, Pinder et al. as modified teaches wherein the second and third functions are one-way functions (col. 8, line 64 through col. 9, line 24 and lines 41-55).

Regarding claim 24, Pinder et al. teaches further comprising means for allowing a user to input the issue ID information (col. 15, lines 36-55).

Claims 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinder et al. (U.S. Patent No. 6,105,134) in view of Widmer (U.S. Patent No. 4,313,031).

Regarding claims 24 and 28, Pinder et al. teaches all the limitations of claims 21 and 25, respectively, above. However, Pinder et al. does not teach further comprising means for allowing a user to input the issue ID information.

Widmer teaches further comprising means for allowing a user to input the issue ID information (fig. 1, ref. num 1).

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It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine allowing a user to input the issue ID information, as taught by Widmer, with the apparatus of Pinder et al. It would have been obvious to one of ordinary skill in the art to combine allowing a user to input the issue ID information, as taught by Widmer, with the apparatus of Pinder et al. because an inputting means for the issue ID information would provide a way to encrypt/decrypt data directly based off of the data inputted from the input device instead of using predetermined keys. This allows the issue ID to be changed at anytime by the user of the system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 703-305-4662. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



BH
3/16/04



AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100